31 JAN 2006

[redacted]cket No.: 043888-0428 **PATENT**

IFW

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

OIPE IAP13 JAN 31 2006 PATENT & TRADEMARK OFFICE

In re Application of : Customer Number: 20277

Kaoru INOUE, et al. : Confirmation Number: 3628

Application No.: 10/562,438 : Group Art Unit: Not yet assigned

Filed: December 28, 2005 : Examiner: Not yet assigned

For: NON-AQUEOUS ELECTROLYTE SECONDARY BATTERY

Mail Stop Petition
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Transmitted herewith is a Preliminary Amendment in the above-identified application.

- ☐ No additional fee is required.
- ☐ Applicant is entitled to small entity status under 37 CFR 1.27
- ☒ Also attached: PETITION TO MAKE SPECIAL UNDER 37 CFR § 1.102(d)

The fee has been calculated as shown below:

| | NO. OF CLAIMS | HIGHEST PREVIOUSLY PAID FOR | EXTRA CLAIMS | RATE | FEE |
|---|---|---|---|---|---|
| Total Claims | 9 | 20 | 0 | $50.00 = | $0.00 |
| Independent Claims | 3 | 3 | 0 | $200.00 = | $0.00 |
| | | Multiple dependent claims newly presented | | | $0.00 |
| | | Fee for extension of time | | | $0.00 |
| | | PETITION TO MAKE SPECIAL UNDER 37 CFR § 1.102(d) | | | $130.00 |
| | | Total of Above Calculations | | | $130.00 |

☒ Please charge my Deposit Account No. 500417 in the amount of $130.00. An additional copy of this transmittal sheet is submitted herewith.

☒ The Commissioner is hereby authorized to charge payment of any fees associated with this communication or credit any overpayment, to Deposit Account No. 500417, including any filing fees under 37 CFR 1.16 for presentation of extra claims and any patent application processing fees under 37 CFR 1.17.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP

Bernard P. Codd

Bernard P. Codd
Registration No. 46,429

600 13th Street, N.W.
Washington, DC 20005-3096
Phone: 202.756.8000 BPC:kap
Facsimile: 202.756.8087

**Date: January 31, 2006**

**Please recognize our Customer No. 20277 as our correspondence address.**

Docket No.: 043888-0428 **PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

| | |
|---|---|
| In re Application of | Customer Number: 20277 |
| Kaoru INOUE, et al. | Confirmation Number: 3628 |
| Application No.: 10/562,438 | Group Art Unit: Not yet assigned |
| Filed: December 28, 2005 | Examiner: Not yet assigned |

For: NON-AQUEOUS ELECTROLYTE SECONDARY BATTERY

**PETITION TO MAKE SPECIAL UNDER 37 C.F.R. § 1.102(d)**

Mail Stop Petition
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicants hereby petition to make special the above-identified application in accordance with 37 C.F.R. § 1.102(d). Pursuant to MPEP § 708.02(VIII), Applicant complies with each of the following items:

**A. FEE**

Please charge Deposit Account 500417 the amount of $130.00 as set forth in 37 C.F.R. § 1.17(h) to cover the fee for the present Petition to Make Special.

02/02/2006 MKAYPAGH 00000164 500417 10562438
01 FC:1464 130.00 DA

**B. SINGLE INVENTION**

If the Office determines that all the claims presented are not obviously directed to a single invention, Applicants will make an election without traverse and hereby invites the Examiner to telephone the undersigned Applicants' representative for a telephonic election.

**C. PRE-EXAMINATION SEARCH**

Applicants submit that a search was made by a foreign patent office in connection with PCT/JP2005/005158 which the present application claims priority under 35 U.S.C. § 371. A copy of the International Search Report (PCT/ISA/210) was filed with an IDS on December 28, 2005.

**D. COPY OF THE REFERENCES**

Each of the references have been previously cited on an Information Disclosure Statement filed on December 28, 2005. These references are:

U.S. Pat. Pub. No. 2002/0102456;

U.S. Pat. Pub. No. 2001/0009736;

U.S. Pat. Pub. No. 2002/0146626;

WO 99/36981;

WO 99/26307;

WO 01/95421;

Japanese Patent Application Laid Open Pub. No. JP 10-214611;

Japanese Patent Application Laid Open Pub. No. JP 2003-282148;

Japanese Patent Application Laid Open Pub. No. JP 2003-297429;

Japanese Patent Application Laid Open Pub. No. JP 07-220759;

Japanese Patent Application Laid Open Pub. No. JP 11-144706;

Japanese Patent Application Laid Open Pub. No. JP 09-147916;

Japanese Patent Application Laid Open Pub. No. JP 2001-319634; and

Japanese Patent Application Laid Open Pub. No. JP 2002-008730.

## E. DETAILED DISCUSSION

*Present Invention*

The present invention relates to a non-aqueous electrolyte secondary battery.

Claim 1 recites:

1. A non-aqueous electrolyte secondary battery comprising: a positive electrode; a negative electrode; a separator interposed between said positive electrode and said negative electrode; a non-aqueous electrolyte; and a porous insulating film adhered to a surface of at least one selected from the group consisting of said positive electrode and said negative electrode,

said porous insulating film comprising an inorganic oxide filler and a film binder,

wherein the ratio R of actual volume to apparent volume of said separator is not less than 0.4 and not greater than 0.7, and

wherein said ratio R and a porosity P of said porous insulating film satisfy the relational formula:

$-0.10 \leqq R-P \leqq 0.30$.

Claim 12 recites:

12. A non-aqueous electrolyte secondary battery comprising: a positive electrode; a negative electrode; a separator interposed between said positive electrode and said negative electrode; a non-aqueous electrolyte; and a porous insulating film adhered to a surface of at least one selected from the group consisting of said positive electrode and said negative electrode,

said porous insulating film comprising an inorganic oxide filler and a film binder,

wherein said inorganic oxide filler comprises polycrystalline particles,

wherein said polycrystalline particles each comprise a plurality of primary particles that are diffusion-bonded together,

wherein the amount of said film binder contained in said porous insulating film is not greater than 4 parts by weight per 100 parts by weight of said inorganic oxide filler, and

wherein 90% cumulative volume pore size D90 in a pore size distribution of said porous insulating film measured by a mercury intrusion porosimeter is not less than 0.15 μm.

Claim 15 recites:

15. A non-aqueous electrolyte secondary battery comprising: a positive electrode; a negative electrode; a separator interposed between said positive electrode and said negative electrode; a non-aqueous electrolyte; and a porous insulating film adhered to a surface of at least one selected from the group consisting of said positive electrode and said negative electrode,

said porous insulating film comprising an inorganic oxide filler and a film binder,

wherein a void capable of retaining said non-aqueous electrolyte is formed on an adhering interface where said porous insulating film adheres to said electrode surface, and

the amount of said film binder contained in said porous insulating film is not greater than 4 parts by weight per 100 parts by weight of said inorganic oxide filler.

Non-aqueous electrolyte secondary batteries according to the present invention require a porous insulating film adhered to a surface of at least one of the positive and negative electrodes. The insulating layer comprises an inorganic oxide filler and a film binder. The secondary batteries according to the present further require that the ratio R of actual volume to apparent volume of the separator is not less than 0.4 and not greater than 0.7, wherein the ratio R and a porosity P of the porous insulating film satisfy the relational formula: $-0.10 \leqq R-P \leqq 0.30$, as in the embodiment of claim 1; that the organic oxide filler comprises polycrystalline particles, wherein the polycrystalline particles each comprise a plurality of primary particles that are diffusion-bonded together, the amount of the film binder contained in the porous insulating film is not greater than 4 parts by

weight per 100 parts by weight of the inorganic oxide filler, and 90% cumulative volume pore size D90 in a pore size distribution of the porous insulating film measured by a mercury intrusion porosimeter is not less than 0.15 μm, as in the embodiment of claim 12; and a void capable of retaining the non-aqueous electrolyte is formed on an adhering interface where the porous insulating film adheres to the electrode surface and the amount of the film binder contained in the porous insulating film is not greater than 4 parts by weight per 100 parts by weight of the inorganic oxide filler, as in the embodiment of claim 15.

An object of the present invention is to provide a non-aqueous electrolyte secondary battery comprising a porous insulating film adhered to an electrode surface which can prevent the deterioration of discharge characteristic particularly during low temperature discharge or during large current discharge and can provide excellent safety. Another object of the present invention is to provide a non-aqueous electrolyte secondary battery comprising a porous insulating film adhered to an electrode surface which can provide excellent thermal resistance, great safety against short-circuit and superior discharge characteristic by relieving the effect resulting from the swelling of the porous insulating film. Yet another object of the present invention is to provide a non-aqueous electrolyte secondary battery comprising a porous insulating film adhered to an electrode surface which can provide excellent thermal resistance, great safety against short-circuit, and superior discharge characteristic by improving the adhering interface between the porous insulating film and the electrode surface. (*See* page 5 of the written description).

**Discussion Of Prior Art**

U.S. Pat. Pub. No. 2002/0102456 and WO 99/36981 were cited by the Examiner in PCT/JP2005/005158 as X references against claims 1, 3, 5, 9, and 10 indicating that the Examiner considered that these claims lacked novelty. New claims 11-18 are supported by claims 1-10. U.S. Pat. Pub. Nos. 2001/0009736, 2002/0146626, WO 99/26307, WO 01/95421, Japanese Patent Application Laid Open Pub. Nos. JP 10-214611, JP 2003-282148, and JP 2003-297429 were cited by the Examiner in PCT/JP2005/005158 as Y references against claims 1, 3, 5, 9, and 10 indicating that the Examiner considered that these claims lacked an inventive step when these references were combined with one or more additional references. The Examiner cited U.S. Pat. Pub. Nos. 2002/0102456, 2001/0009736, 2002/0146626, WO 99/36981, WO 99/26307, and WO 01/95421 in PCT/JP2005/005158 as A references against claims 2, 4, and 6-8 indicating that these documents are not considered to be of particular relevance but that they generally define the state of the art. Japanese Patent Application Laid Open Pub. Nos. JP 07-220759, JP 11-144706, JP 09-147916, JP 2001-319634, and JP 2002-008730 are discussed in the written description of the present invention.

***Comparison with U.S. Pat. Pub. No. 2002/0102456 and WO 99/36981***

The `456 publication and WO `981 are directed toward a battery requiring no outer case. The positive electrode, negative electrode, and separator are joined by an adhesive resin layer containing a filler. The adhesive resin layer has pores that are filled with an electrolytic solution. The examples of the `456 publication and WO `981 suggest that at least about 20 parts by weight of film binder is required per 100 parts by weight of

the inorganic oxide filler in the adhesive layer. The `456 publication and WO `981, however, do not suggest non-aqueous electrolyte secondary batteries comprising a separator and a porous-insulating film wherein a ratio R of actual volume to apparent volume of the separator is not less than 0.4 and not greater than 0.7, and the ratio R and a porosity P of the porous insulating film satisfy the relational formula: $-0.10 \leqq R-P \leqq 0.30$; wherein the organic oxide filler comprises polycrystalline particles and the polycrystalline particles each comprise a plurality of primary particles that are diffusion-bonded together, the amount of the film binder contained in the porous insulating film is not greater than 4 parts by weight per 100 parts by weight of the inorganic oxide filler, and 90% cumulative volume pore size D90 in a pore size distribution of the porous insulating film measured by a mercury intrusion porosimeter is not less than 0.15 μm; and wherein a void capable of retaining the non-aqueous electrolyte is formed on an adhering interface where the porous insulating film adheres to the electrode surface and the amount of the film binder contained in the porous insulating film is not greater than 4 parts by weight per 100 parts by weight of the inorganic oxide filler.

***Comparison with U.S. Pat. Pub. No. 2001/0009736 and WO/26307***

The `736 publication and WO `307 are directed toward a lithium ion secondary battery comprising positive or negative electrodes adhered with two separators by an adhesive layer. Example 1 of the `736 publication and WO `307 suggests that 100 parts by weight of film binder is required per 100 parts by weight of the inorganic oxide filler in the adhesive layer. The `456 publication and WO `981, however, do not suggest non-aqueous electrolyte secondary batteries comprising a separator and a porous-insulating

film wherein a ratio R of actual volume to apparent volume of the separator is not less than 0.4 and not greater than 0.7, and the ratio R and a porosity P of the porous insulating film satisfy the relational formula: $-0.10 \leqq R\text{-}P \leqq 0.30$; wherein the organic oxide filler comprises polycrystalline particles and the polycrystalline particles each comprise a plurality of primary particles that are diffusion-bonded together, the amount of the film binder contained in the porous insulating film is not greater than 4 parts by weight per 100 parts by weight of the inorganic oxide filler, and 90% cumulative volume pore size D90 in a pore size distribution of the porous insulating film measured by a mercury intrusion porosimeter is not less than 0.15 μm; and wherein a void capable of retaining the non-aqueous electrolyte is formed on an adhering interface where the porous insulating film adheres to the electrode surface and the amount of the film binder contained in the porous insulating film is not greater than 4 parts by weight per 100 parts by weight of the inorganic oxide filler.

***Comparison with U.S. Pat. Pub. No. 2001/0146626 and WO/95421***

The `626 publication and WO `421 are directed toward a battery comprising positive or negative electrodes adhered to a separator by a porous resin layer containing a solid filler. The `626 publication and WO `421 disclose that 100 parts by weight of film binder is required per 100 parts by weight of solid filler in the porous resin layer (para. [0038]). The `626 publication and WO `421, however, do not suggest non-aqueous electrolyte secondary batteries comprising a separator and a porous-insulating film wherein a ratio R of actual volume to apparent volume of the separator is not less than 0.4 and not greater than 0.7, and the ratio R and a porosity P of the porous insulating film satisfy the relational formula: $-0.10 \leqq R\text{-}P \leqq 0.30$; wherein the organic oxide filler

comprises polycrystalline particles and the polycrystalline particles each comprise a plurality of primary particles that are diffusion-bonded together, the amount of the film binder contained in the porous insulating film is not greater than 4 parts by weight per 100 parts by weight of the inorganic oxide filler, and 90% cumulative volume pore size D90 in a pore size distribution of the porous insulating film measured by a mercury intrusion porosimeter is not less than 0.15 μm; and wherein a void capable of retaining the non-aqueous electrolyte is formed on an adhering interface where the porous insulating film adheres to the electrode surface and the amount of the film binder contained in the porous insulating film is not greater than 4 parts by weight per 100 parts by weight of the inorganic oxide filler.

***Comparison with JP 10-214611***

The JP `611 abstract is directed toward a lithium battery separator comprising a polyolefine film impregnated with ethylene carbonate inside microprobes. The JP `611 abstract, however, does not suggest non-aqueous electrolyte secondary batteries comprising a separator and a porous-insulating film wherein a ratio R of actual volume to apparent volume of the separator is not less than 0.4 and not greater than 0.7, and the ratio R and a porosity P of the porous insulating film satisfy the relational formula: $-0.10 \leqq R-P \leqq 0.30$; wherein the organic oxide filler comprises polycrystalline particles and the polycrystalline particles each comprise a plurality of primary particles that are diffusion-bonded together, the amount of the film binder contained in the porous insulating film is not greater than 4 parts by weight per 100 parts by weight of the inorganic oxide filler, and 90% cumulative volume pore size D90 in a pore size distribution of the porous insulating film measured by a mercury intrusion porosimeter is

not less than 0.15 μm; and wherein a void capable of retaining the non-aqueous electrolyte is formed on an adhering interface where the porous insulating film adheres to the electrode surface and the amount of the film binder contained in the porous insulating film is not greater than 4 parts by weight per 100 parts by weight of the inorganic oxide filler.

***Comparison with JP 2003-282148***

The JP `148 abstract is directed toward a lithium battery separator comprising polyethylene having a heat shrinkage percentage of 20% or less for one hour at 120° C. The JP `148 abstract, however, does not suggest non-aqueous electrolyte secondary batteries comprising a separator and a porous-insulating film wherein a ratio R of actual volume to apparent volume of the separator is not less than 0.4 and not greater than 0.7, and the ratio R and a porosity P of the porous insulating film satisfy the relational formula: $-0.10 \leqq R-P \leqq 0.30$; wherein the organic oxide filler comprises polycrystalline particles and the polycrystalline particles each comprise a plurality of primary particles that are diffusion-bonded together, the amount of the film binder contained in the porous insulating film is not greater than 4 parts by weight per 100 parts by weight of the inorganic oxide filler, and 90% cumulative volume pore size D90 in a pore size distribution of the porous insulating film measured by a mercury intrusion porosimeter is not less than 0.15 μm; and wherein a void capable of retaining the non-aqueous electrolyte is formed on an adhering interface where the porous insulating film adheres to the electrode surface and the amount of the film binder contained in the porous insulating film is not greater than 4 parts by weight per 100 parts by weight of the inorganic oxide filler.

***Comparison with JP 2003-297429***

The JP `429 abstract is directed toward a lithium battery separator wherein the thickness of the thinnest part of the separator is 70 to 95% of that of the thickest part. The JP `429 abstract, however, does not suggest non-aqueous electrolyte secondary batteries comprising a separator and a porous-insulating film wherein a ratio R of actual volume to apparent volume of the separator is not less than 0.4 and not greater than 0.7, and the ratio R and a porosity P of the porous insulating film satisfy the relational formula: $-0.10 \leqq R-P \leqq 0.30$; wherein the organic oxide filler comprises polycrystalline particles and the polycrystalline particles each comprise a plurality of primary particles that are diffusion-bonded together, the amount of the film binder contained in the porous insulating film is not greater than 4 parts by weight per 100 parts by weight of the inorganic oxide filler, and 90% cumulative volume pore size D90 in a pore size distribution of the porous insulating film measured by a mercury intrusion porosimeter is not less than 0.15 μm; and wherein a void capable of retaining the non-aqueous electrolyte is formed on an adhering interface where the porous insulating film adheres to the electrode surface and the amount of the film binder contained in the porous insulating film is not greater than 4 parts by weight per 100 parts by weight of the inorganic oxide filler.

***Comparison with JP 07-220759***

The JP `759 abstract is directed to a nonaqueous electrolyte secondary battery comprising a porous protecting film of a specific thickness in a surface of any active material applied layer. The JP `759 abstract, however, does not suggest non-aqueous electrolyte secondary batteries comprising a separator and a porous-insulating film

wherein a ratio R of actual volume to apparent volume of the separator is not less than 0.4 and not greater than 0.7, and the ratio R and a porosity P of the porous insulating film satisfy the relational formula: $-0.10 \leqq R-P \leqq 0.30$; wherein the organic oxide filler comprises polycrystalline particles and the polycrystalline particles each comprise a plurality of primary particles that are diffusion-bonded together, the amount of the film binder contained in the porous insulating film is not greater than 4 parts by weight per 100 parts by weight of the inorganic oxide filler, and 90% cumulative volume pore size D90 in a pore size distribution of the porous insulating film measured by a mercury intrusion porosimeter is not less than 0.15 μm; and wherein a void capable of retaining the non-aqueous electrolyte is formed on an adhering interface where the porous insulating film adheres to the electrode surface and the amount of the film binder contained in the porous insulating film is not greater than 4 parts by weight per 100 parts by weight of the inorganic oxide filler.

***Comparison with JP 11-144706***

The JP `706 abstract is directed to a battery comprising a fine porous film having a number of fine holes with a bulk density of 0.05 g/cc or more that is integrated on an electrode. The material of the fine porous film preferably has a glass transition point of 250° C or lower. The JP `706 abstract, however, does not suggest non-aqueous electrolyte secondary batteries comprising a separator and a porous-insulating film wherein a ratio R of actual volume to apparent volume of the separator is not less than 0.4 and not greater than 0.7, and the ratio R and a porosity P of the porous insulating film satisfy the relational formula: $-0.10 \leqq R-P \leqq 0.30$; wherein the organic oxide filler comprises polycrystalline particles and the polycrystalline particles each comprise a

plurality of primary particles that are diffusion-bonded together, the amount of the film binder contained in the porous insulating film is not greater than 4 parts by weight per 100 parts by weight of the inorganic oxide filler, and 90% cumulative volume pore size D90 in a pore size distribution of the porous insulating film measured by a mercury intrusion porosimeter is not less than 0.15 μm; and wherein a void capable of retaining the non-aqueous electrolyte is formed on an adhering interface where the porous insulating film adheres to the electrode surface and the amount of the film binder contained in the porous insulating film is not greater than 4 parts by weight per 100 parts by weight of the inorganic oxide filler.

***Comparison with JP 09-147916***

The JP `916 abstract is directed to a nonaqueous electrolyte secondary battery comprising at least one protecting layer formed of solid particles and a water soluble polymer. A polyacrylic derivative or cellulose derivative can be used as the water soluble polymer. The JP `916 abstract, however, does not suggest non-aqueous electrolyte secondary batteries comprising a separator and a porous-insulating film wherein a ratio R of actual volume to apparent volume of the separator is not less than 0.4 and not greater than 0.7, and the ratio R and a porosity P of the porous insulating film satisfy the relational formula: $-0.10 \leqq R-P \leqq 0.30$; wherein the organic oxide filler comprises polycrystalline particles and the polycrystalline particles each comprise a plurality of primary particles that are diffusion-bonded together, the amount of the film binder contained in the porous insulating film is not greater than 4 parts by weight per 100 parts by weight of the inorganic oxide filler, and 90% cumulative volume pore size D90 in a pore size distribution of the porous insulating film measured by a mercury

intrusion porosimeter is not less than 0.15 μm; and wherein a void capable of retaining the non-aqueous electrolyte is formed on an adhering interface where the porous insulating film adheres to the electrode surface and the amount of the film binder contained in the porous insulating film is not greater than 4 parts by weight per 100 parts by weight of the inorganic oxide filler.

***Comparison with JP 2001-319634***

The JP `634 abstract is directed to a lithium secondary battery comprising at least one ceramic composite layer containing a mixture of inorganic particles in a matrix material and formed so as to at least hinder the growth of dendritic crystals. The JP `634 abstract, however, does not suggest non-aqueous electrolyte secondary batteries comprising a separator and a porous-insulating film wherein a ratio R of actual volume to apparent volume of the separator is not less than 0.4 and not greater than 0.7, and the ratio R and a porosity P of the porous insulating film satisfy the relational formula: $-0.10 \leqq R-P \leqq 0.30$; wherein the organic oxide filler comprises polycrystalline particles and the polycrystalline particles each comprise a plurality of primary particles that are diffusion-bonded together, the amount of the film binder contained in the porous insulating film is not greater than 4 parts by weight per 100 parts by weight of the inorganic oxide filler, and 90% cumulative volume pore size D90 in a pore size distribution of the porous insulating film measured by a mercury intrusion porosimeter is not less than 0.15 μm; and wherein a void capable of retaining the non-aqueous electrolyte is formed on an adhering interface where the porous insulating film adheres to the electrode surface and the amount of the film binder contained in the porous insulating

film is not greater than 4 parts by weight per 100 parts by weight of the inorganic oxide filler.

***Comparison with JP 2002-008730***

The JP `730 abstract is directed to a lithium secondary battery comprising a separator and a 20 micron or less thin layer for retaining electrolyte formed on the side of the separator facing the negative electrode. Inorganic particles, such as alumina and silica are dispersed on the inside of the electrolyte retaining layer. The JP `730 abstract, however, does not suggest non-aqueous electrolyte secondary batteries comprising a separator and a porous-insulating film wherein a ratio R of actual volume to apparent volume of the separator is not less than 0.4 and not greater than 0.7, and the ratio R and a porosity P of the porous insulating film satisfy the relational formula: $-0.10 \leqq R-P \leqq 0.30$; wherein the organic oxide filler comprises polycrystalline particles and the polycrystalline particles each comprise a plurality of primary particles that are diffusion-bonded together, the amount of the film binder contained in the porous insulating film is not greater than 4 parts by weight per 100 parts by weight of the inorganic oxide filler, and 90% cumulative volume pore size D90 in a pore size distribution of the porous insulating film measured by a mercury intrusion porosimeter is not less than 0.15 μm; and wherein a void capable of retaining the non-aqueous electrolyte is formed on an adhering interface where the porous insulating film adheres to the electrode surface and the amount of the film binder contained in the porous insulating film is not greater than 4 parts by weight per 100 parts by weight of the inorganic oxide filler.

## F. CONCLUSION

In view of the above, it is urged that the petition to make special is in proper form, and an indication of grant is respectfully solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

MCDERMOTT WILL & EMERY LLP

Bernard P. Codd

Bernard P. Codd
Registration No. 46,429

600 13th Street, N.W.
Washington, DC 20005-3096
Phone: 202.756.8000 BPC:kap
Facsimile: 202.756.8087
**Date: January 31, 2006**

**Please recognize our Customer No. 20277 as our correspondence address.**